much as the steering angle at which the driver steers the steering wheel **20** in a direction opposite to the rotation direction of the vehicle.

[0094] Specifically, at the same time as the vehicle is rotated, for the in-situ rotation of the vehicle, the steering wheel **20** may be rotated according to the steering angle at which the driver steers the steering wheel **20** in the direction opposite to the rotation direction of the vehicle, and when the rotation of the vehicle is terminated, the steering wheel **20** may be restored and rotated by as much as the steering angle at which the driver steers the steering wheel **20** in the direction opposite to the rotation direction of the vehicle so that a termination point of time of the in-situ rotation may be recognized.

[0095] That is, in a state in which the in-situ rotation mode of the vehicle is executed, when the driver rotates the steering wheel **20** in a clockwise direction, the vehicle is rotated in-situ by as much as the target rotation angle in the clockwise direction.

[0096] Thus, at the same time as the in-situ rotation of the vehicle, the steering wheel **20** is restored and rotated by as much as the steering angle at which the driver steers the steering wheel **20** in the counterclockwise direction opposite to the rotation direction of the vehicle so that in a state in which the rotation of the vehicle is completed by as much as the target rotation angle, an absolute angle of the steering wheel **20** maintains a state before the rotation of the vehicle.

[0097] Thus, since the steering wheel **20** is restored and rotated by as much as the angle at which the driver steers and rotates the steering wheel **20**, a steering direction before the rotation of the vehicle may be maintained and a point of time at which the in-situ rotation of the vehicle is terminated is notified to the driver. Therefore, the driver easily recognizes the point of time at which the in-situ rotation of the vehicle is terminated so that convenience of the in-situ rotation function is increased and an accident risk is reduced.

[0098] In addition, in the rotation control operation, during the in-situ rotation of the vehicle, when the steering wheel **20** is additionally steered in the rotation direction of the vehicle, the vehicle may be further rotated by as much as an additional steering angle of the steering wheel **20**.

[0099] That is, while the driver rotates the steering wheel **20** in the clockwise direction and thus the vehicle is rotated in-situ in the clockwise direction, when the driver further rotates the steering wheel **20** in the clockwise direction which is the rotation direction of the vehicle, the vehicle is further rotated in the clockwise direction by as much as the rotation angle of the steering wheel **20** so that the driver may rotate the vehicle by as much as a desired rotation angle.

[0100] Meanwhile, in the rotation control operation of embodiments of the present disclosure, the rotation angle of the vehicle may be guided through a notification part.

[0101] For example, as an exemplary embodiment of the notification part, the rotation angle of the vehicle may be displayed on a cluster or may be guided by voice.

[0102] When the rotation angle of the vehicle is displayed on the cluster, smooth operation recommendations of the accelerator pedal **30** may be guided together with the angle at which the vehicle is rotated in-situ.

[0103] In addition, as another embodiment of the notification part, a warning sound may be provided at a predetermined rotation angle during the in-situ rotation of the vehicle.

[0104] For example, as show in FIG. **4**, when the vehicle is rotated by as much as the angle of 30° for each step, the warning sound may be provided at every angle of 30°.

[0105] In addition, as still another embodiment of the notification part, a different operation feeling may be temporarily provided to the steering wheel **20** at a predetermined rotation angle during the in-situ rotation of the vehicle.

[0106] For example, FIG. **8** is a diagram for describing an operation of warning an in-situ rotation angle through an operation feeling change in embodiments of the present disclosure, and when the vehicle is rotated by as much as an angle of 30° for each step, a sense of holding to the steering wheel **20** may be provided at every angle of 30°.

[0107] Meanwhile, according to embodiments of the present disclosure, in the rotation control operation, a rotation speed of the vehicle is determined according to a step-in amount of the accelerator pedal **30** so that the vehicle may be rotated in-situ.

[0108] For example, in the case of a vehicle in which the driving part **70** is an engine, an opening degree amount of a throttle is adjusted by as much as an amount by which the driver steps on the accelerator pedal **30** to rotate the vehicle. In the case of a vehicle in which the driving part **70** is a motor, an output of the motor is determined by as much as an amount by which the driver steps on the accelerator pedal **30** to rotate the vehicle.

[0109] However, in the rotation control operation, rotational acceleration may be gradually increased within the range of the step-in amount of the accelerator pedal **30** at an initial stage of the rotation of the vehicle.

[0110] That is, when the driver excessively steps on the accelerator pedal **30** at an initial stage of the in-situ rotation, there are problems of dizziness due to a rapid turning of the vehicle, instability of a vehicle behavior, and reduction in lifetime of durability of related chassis parts.

[0111] Thus, yawing acceleration is gradually increased within the step-in amount range of the accelerator pedal **30** stepped on by the driver at the initial stage of the rotation of the vehicle so that smooth rotational acceleration is performed. Therefore, when the vehicle starts to be rotated, rapid acceleration is prevented so that smooth ride comfort may be provided and the vehicle may be safely rotated. Such rotational acceleration may be controlled by adjusting the opening degree amount of the throttle or adjusting an output of the motor.

[0112] In addition, in the rotation control operation, the rotational acceleration may be gradually reduced before reaching the target rotation angle at an end stage of the rotation of the vehicle.

[0113] That is, in order to allow smooth deceleration to be performed at the initial stage of the rotation of the vehicle as well as the end stage of the rotation of the vehicle, the yawing acceleration is gradually reduced so that rapid deceleration of the vehicle is prevented and thus smooth ride comfort may be provided.

[0114] In particular, when the rotational acceleration is controlled at the end stage of the rotation of the vehicle, braking is not performed according to the intent of the driver but is controlled to be stopped by itself at a position of the target rotation angle so that acceleration control may be performed more simply.